

Listing of Claims:

1. (Currently amended) A catalytic system comprising:

a ceramic support comprising alumina, said ceramic support ~~having~~ including a surface that comprises a monolayer of an adhesive agent located at provided on said surface, said adhesive agent ~~being selected from the group consisting~~ comprising at least one of titanium, zirconium, scandium, hafnium, lanthanum, and yttrium metals; and

a plurality of metal catalyst particles attached to the surface of said ceramic support wherein said monolayer of the adhesive agent provides increased adhesion between the ceramic support and the plurality of metal catalyst particles.

2. (Original) A catalytic system according to claim 1 wherein said ceramic support is in the shape of a particle.

3. (Original) A catalytic system according to claim 1 wherein said metal catalyst particles are selected from the group consisting of nickel, palladium and platinum.

4. (Original) A catalytic system according to claim 1 wherein said adhesive agent is in the form of a $\frac{1}{4}$ to $\frac{3}{4}$ monolayer on said surface.

5. (Currently amended) A catalytic system according to claim 1 wherein said adhesive agent is ~~selected from the group consisting of titanium, zirconium, yttrium and scandium~~ applied to the surface of the ceramic support as reduced metals.

6. (Original) A catalytic system according to claim 1 wherein two or more adhesive agents are present at the surface of said support.

7. (Currently amended) A catalytic system according to claim 1 ~~which comprises a monolith having a surface comprising metal on which said ceramic support is attached~~ wherein the ceramic support further comprising a second surface on which a monolayer of said adhesive agent is provided; and

the catalytic system further comprising a monolith attached to said second surface of the ceramic support.

8. (Currently amended) A catalytic system according to claim 1 ~~which comprises a monolith having a surface comprising metal on which said oxide ceramic support is attached~~ 7, the monolith having a surface comprising metal on which said second surface of the ceramic support is attached.

9. (Withdrawn) A method for making a catalytic system comprising the steps of:

providing a ceramic support comprising alumina, said ceramic support having a surface;
treating said surface with an adhesive agent to provide a modified surface that is doped with said adhesive agent, said adhesive agent being selected from the group consisting of titanium, zirconium, scandium, hafnium, lanthanum and yttrium; and
attaching a plurality of metal catalyst particles to the modified surface of said ceramic support to provide a supported metal catalyst.

10. (Withdrawn) A method for making a catalytic system according to claim 9 wherein said ceramic support is in the shape of a particle.

11. (Withdrawn) A method for making a catalytic system according to claim 9 wherein said metal catalyst particles are selected from the group consisting of nickel, palladium and platinum.

12. (Withdrawn) A method for making a catalytic system according to claim 9 wherein said adhesive agent is in the form of a $\frac{1}{4}$ to $\frac{3}{4}$ monolayer on said surface.

13. (Withdrawn) A method for making a catalytic system according to claim 9 wherein said adhesive agent is selected from the group consisting of titanium, zirconium, yttrium and scandium.

14. (Withdrawn) A method for making a catalytic system according to claim 1 wherein two or more adhesive agents are present at the surface of said support.

15. (Withdrawn) A method for making a catalytic system according to claim 9 that includes the additional step of attaching said supported metal catalyst to a metallic monolith structure.

16. (Withdrawn) A method for making a catalytic system according to claim 10 that includes the additional step of attaching said supported metal catalyst to a metallic monolith structure.

17. – 23. (Canceled)

24. (New) A catalytic system according to claim 1 wherein said adhesive agent is in the form of a $\frac{1}{2}$ monolayer on said surface.

25. (New) A catalytic system according to claim 7 wherein the monolayer of the adhesive agent on said second surface of the ceramic support is in the form of a $\frac{1}{4}$ to $\frac{3}{4}$ monolayer.

26. (New) A catalytic system according to claim 7 wherein the monolayer of the adhesive agent on said second surface of the ceramic support is in the form of a $\frac{1}{2}$ monolayer.

27. (New) A catalytic system according to claim 1 wherein the adhesive agent is applied to the surface of the ceramic support as suboxides.

28. (New) A catalytic system according to claim 7 wherein the adhesive agent is applied to the second surface of the ceramic support as reduced metals.

29. (New) A catalytic system according to claim 7 wherein the adhesive agent is applied to the second surface of the ceramic support as suboxides.